

REMARKS

Favorable reconsideration and allowance of the present patent application are respectfully requested in view of the following remarks. Claims 1-32 and 34-54 were pending prior to the Office Action. Claims 1, 34, and 43-54 have been withdrawn, and claims 55 and 56 have been added by this Reply. Therefore, claims 1-32 and 34-56 are pending. Claims 35 and 55 are independent.

Claim 35 has been amended merely to correct grammar. The scope of the claim remains unchanged.

Rejection under 35 U.S.C. §103(a) based on Gudesen et al.

Claims 2-7, 9-20, 30, and 35-42 are rejected under 35 U.S.C. §103(a) as being unpatentable over Gudesen et al. (WO 9/14762, hereinafter "Gudesen"). Applicants respectfully traverse this rejection.

For a Section 103 rejection to be valid, a *prima facie* case of obviousness must be established. See *M.P.E.P.* 2142. One requirement to establish a *prima facie* case of obviousness is that the prior art references, when combined, must teach or suggest all claim limitations. See *M.P.E.P.* 2142; *M.P.E.P.* 706.02(j). Thus, if a cited reference fails to teach or suggest one or more elements, the rejection is improper and must be withdrawn.

In this instance, independent claim 35 recites, in part, "wherein said elements are arranged in said predetermined circuit

pattern by integrating said elements using **weaving, knitting, crocheting, knotting, or stitching**". In the Office Action, it is admitted that Gudesen does not teach or suggest this feature.

Another requirement to establish a *prima facie* case of obviousness is that there must be a suggestion or motivation within a cited reference to modify the reference as proposed in the Office Action. See M.P.E.P. 2143.01. The cited reference must be considered in its entirety, including disclosures that teach away from the claimed invention. See M.P.E.P. 2141.02. If the cited reference teaches away from the claimed invention, the rejection is improper and must fail.

As noted, it has been shown that Gudesen does not teach or suggest the above-noted feature. To cure this deficiency of Gudesen, it is merely stated in the Office Action that patching layers of conducting material to form conducting patterns of electrical circuitry is known as "stitching" of conducting elements and that this practice is well known. However, it is noted that Gudesen cannot be relied upon to teach or suggest such an allegation.

Indeed, when considered in its entirety, Gudesen actually teaches away from at least this feature. More specifically, Gudesen is directed to forming a READ-ONLY memory using a matrix of conductors and forming memory elements at the intersections thereof. In the formation of the memory, the conductors are deposited and

etched on a layer-by-layer basis. See FIGS. 4A-4C. Gudesen specifically discloses that the manufacturing step may be summed up as comprising depositing of x electrodes on a substrate, applying a global isolating layer and, thereabove, applying a global semiconductor layer, and depositing y electrodes on top of the substrate. See page 13, lines 7-13. This teaching of forming the READ-ONLY memory on a layer-by-layer basis teaches away from the feature of elements being arranged in a predetermined circuit pattern by weaving, knitting, crocheting, knotting, or stitching

In this instance, to the extent that Gudesen actually teaches away from modifying the structure of Gudesen as suggested in the Office Action, Gudesen cannot be relied upon to provide the proper motivation or suggestion for the suggested modification.

Indeed, it is indicated that the purported motivation may be found on page 4, lines 3-8, of Gudesen, where it is asserted that the conducting pattern formation provides a multilevel electronic structure with more flexible technical solutions and reduced costs. See page 3, first full paragraph.

This characterization is flawed, however. The referred-to section of Gudesen states:

The use of organic materials, for instance polymer materials, which realized in thin film technology may be used both in conductors, isolators, and semiconductors materials, something which supposedly shall provide more flexible technical solutions and especially a much reduced cost than would be the case when using crystalline inorganic semiconductors.

In other words, the flexible technical solutions and reduced costs results from the use of organic materials. The referred-to portion is completely silent regarding the physical layout of the structure. Thus, the referred-to portion cannot be relied upon to provide the proper motivation as suggested.

For at least the reasons stated above, independent claim 35 is distinguishable over Gudesen. For at least due to their dependency on independent claim 35, claims 2-7, 9-20, 30, and 36-42 are also distinguishable over Gudesen.

It is noted that these dependent claims are also distinguishable on their own merits. For example, claims 2 and 3 recite that the pattern is a fabric-like structure. Clearly, the layer-by-layer formation of the elements in Gudesen, where no interlacing is involved, cannot reasonably be interpreted to be equivalent to a fabric-like structure.

Also, the x and y electrodes disclosed in Gudesen cannot reasonably be interpreted to be transmission lines made from twisted pair or coaxial cables, as recited in claims 5 and 6.

For at least the above-stated reasons, Applicants respectfully request withdrawal of the rejection of claims 2-7, 9-20, 30, and 35-42 based on Gudesen.

Rejection under 35 U.S.C. §103(a) based on Gudesen and Alton

Claims 8 and 21-29 are rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Gudesen and Alton (U.S. Patent No. 4,521,771). Applicants respectfully traverse this rejection.

It is noted that claims 8 and 21-29 depend directly or indirectly from independent claim 35, and independent claim 35 recites, in part, "wherein said elements are arranged in said predetermined circuit pattern by integrating said elements using weaving, knitting, crocheting, knotting, or stitching". It has been shown that Gudesen cannot be relied upon to render obvious the independent claims.

Alton has not been, and indeed cannot be, relied upon to correct at least the above-noted deficiencies of Gudesen. Therefore, independent claim 35 is distinguishable over the combination of Gudesen and Alton.

For at least due to their dependency on independent claim 35, dependent claims 8 and 21-29 are also distinguishable over the combination of Gudesen and Alton.

Applicants respectfully request withdrawal of the rejection of claims 8 and 21-29 based on Gudesen and Alton.

Rejection under 35 U.S.C. §103(a) based on Gudesen and Wiener

Claims 31 and 32 are rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Gudesen and Wiener (U.S. Patent No. 5,524,679). Applicants respectfully traverse this rejection.

It is noted that claims 31 and 32 depend directly or indirectly from independent claim 35 which, as noted, recites, in part, "wherein said elements are arranged in said predetermined circuit pattern by integrating said elements using weaving, knitting, crocheting, knotting, or stitching". It has been shown that Gudesen cannot be relied upon to render obvious the independent claims.

Wiener has not been, and indeed cannot be, relied upon to correct at least the above-noted deficiencies of Gudesen. Therefore, independent claim 35 is distinguishable over the combination of Gudesen and Wiener.

For at least due to their dependency on independent claim 35, dependent claims 31 and 32 are also distinguishable over the combination of Gudesen and Wiener.

Applicants respectfully request withdrawal of the rejection of claims 31 and 32 based on Gudesen and Wiener.

New Claims

Claims 55 and 56 have been added by this Reply and are believed to be allowable over the cited references. Applicants respectfully request that the new claims be accepted.

CONCLUSION

All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance and such allowance is respectfully solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Hyung Sohn (Reg. No. 44,346), to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly extension of time fees.

Respectfully submitted,

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